UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,712	08/29/2000	Rico Mariani	MS1-579US	1048

22801   7590   05/06/2004

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

EXAMINER
CHEN, SHIN HON

ART UNIT	PAPER NUMBER
2131	3

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 October 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 August 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-35 have been examined.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4.   Claim 15 recites the limitation "the control object" in line2 of claim 15. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 5, 7-10, 17, 18, and 20-23 are rejected under 35 U.S.C. 102(e) as being

clearly anticipated by Balasubramaniam et al. U.S. Pat. No. 6499109 (hereinafter Bal).

7. As per claim 1, Bal discloses a method, comprising: associating a digital signature with a

web page (Bal: column 7 lines 32-38); and delivering the web page to an electronic device

capable of authenticating the digital signature and executing at least a portion of the web page

after the digital signature is authenticated (Bal: column 2 line 43 – column 3 line 19).

8. As per claim 2, Bal discloses the method as recited in claim 1. Bal further discloses

wherein the associating further comprises attaching the digital signature to the web page (Bal:

column 7 lines 32-36).

9. As per claim 5, Bal discloses the method as recited in claim 1. Bal further discloses

wherein the web page contains script that, when executed, invokes executable code that is

executed on the electronic device executing the web page (Bal: column 2 lines 43-65).

10. As per claim 7, Bal discloses a method, comprising: receiving a web page from a server,

the web page containing executable script that, when executed, invokes a control object (Bal:

column 7 lines 26-51), the web page having a segment that uniquely identifies a source of the

web page (Bal: column 7 lines 26-51); authenticating the source of the web page (Bal: column 7

lines 26-51); and displaying the web page and invoking the control object if the web page is

authenticated (Bal: column 7 lines 26-51).

11.   As per claim 8, Bal discloses the method as recited in claim 7. Bal further discloses

determining if the source of the web page is authorized to invoke the control object (Bal: column

7 lines 32-36); and displaying the web page only if the source of the web page is authorized to

invoke the control object (Bal: column 7 lines 26-51).

12.   As per claim 9. Bal discloses the method as recited in claim 7. Bal further discloses

wherein the authenticating further comprises authenticating the source of the web page to

identify the source of the web page (Bal: column 7 lines 26-51).

13.   As per claim 10, Bal discloses the method as recited in claim 7. Bal further discloses

designating one or more authorized sources from which a web page that invokes a control object

may be received; and executing script contained in the web page only if authenticating the source

of the web page indicates that the web page was received from an authorized source (Bal:

column 8 lines 32-63).

14.   As per claim 17, Bal discloses a system, comprising: a web browser configured to access

a web page having a digital signature (Bal: column 1 line 19 – column 3 line 19); a processor

configured to execute script contained in the web page (Bal: column 1 line 19 – column 3 line

19); an executable control object that may be invoked by the script in the web page and is

executable on the processor (Bal: column 1 line 19 – column 3 line 19); a confirmation module

configured to authenticate the digital signature (Bal: column 1 line 19 – column 3 line 19); and

wherein the confirmation module is called when the control object is invoked by the script (Bal: column 7 lines 26-51), the control object executing only if the confirmation module authenticates the digital signature (Bal: column 7 lines 26-51).

15.   As per claim 18, Bal discloses the system as recited in claim 17. Bal further discloses wherein the confirmation module is called by the control object (Bal: column 7 lines 26-51).

16.   As per claim 20, Bal discloses the system as recited in claim 17. Bal further discloses wherein the confirmation module is included in the web browser (Bal: column 7 lines 26-51 and column 3 lines 7-19).

17.   As per claim 21, Bal discloses the system as recited in claim 17. Bal further discloses wherein the confirmation module is further configured to determine if the web page comes from a source that is authorized to invoke the control object and the control object is invoked only if the source of the web page is authorized to invoke the control object (Bal: column 7 lines 26-51).

18.   As per claim 22, the system as recited in claim 17, wherein the confirmation module is called by the web page prior to the web page invoking the control object (Bal: column 7 lines 26-51).

19.   As per claim 23, Bal discloses the system as recited in claim 17, Bal further discloses

wherein the digital signature module is not invoked if the web page does not have a digital

signature (Bal: column 7 lines 29-52).

20.   Claims 11 and 14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by

Yoshiura et al. U.S. Pat. No. 6499105 (hereinafter Yoshiura).

21.   As per claim 11, Yoshiura discloses a system, comprising: a page generator to generate a

web page (Yoshiura: column 30 lines 5-63); a digital signature module configured to derive a

digital signature from the web page and attach the digital signature to the web page (Yoshiura:

column 30 lines 5-63); and a page delivery module to deliver the signed web page to an

electronic device (Yoshiura: column 30 lines 5-63).

22.   As per claim 14, Yoshiura discloses the system as recited in claim 11. Yoshiura further

comprising: a confirmation module configured to authenticate the digital signature (Yoshiura:

column 30 lines 36 – column 31 lines 19).

Claim Rejections - 35 USC § 103

23.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

24.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view of

Yoshiura and further in view of Liu U.S. Pat. No. 6058482 (hereinafter Liu).

25.   As per claim 3, Bal discloses the method as recited in claim 1. Bal does not explicitly

discloses the method comprising: determining if the web page includes code to invoke a control

object; and deriving the digital signature and associating the digital signature with the web page

only if the web page includes code to invoke a control object. However, Yoshiura discloses

determining if a mark with digital signature should be derived and attach to a web page

(Yoshiura: column 30 lines 37-55). It would have been obvious to one having ordinary skill in

the art to combine the teachings of Yoshiura within the system of Bal because it increases

security by determining whether the sender should get the digital signature. Bal as modified does

not explicitly determining if the web page includes code to invoke a control object. However,

Liu discloses that limitation (Liu: column 8 lines 1-50). It would have been obvious to one

having ordinary skill in the art to combine the teachings of Liu within the combination of Bal-

Yoshiura because it increases efficiency by avoiding unnecessary further process.

26.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view of

Yoshiura.

27.   As per claim 4, Bal as modified discloses the method as recited in claim 1. Bal as

modified further discloses wherein the web page includes a confirmation module that is used by

the electronic device to authenticate the digital signature (Yoshiura: column 30 lines 37-55: the

mark).

28.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view of

Myer et al. U.S. Pat. No. 6615088 (hereinafter Myer).

29.   As per claim 6, Bal discloses the method as recited in claim 1. Bal does not explicitly

disclose wherein the web page is generated in an active server page (ASP) environment.

However, Myer discloses that limitation (Myer: column 3 lines 47-54). It would have been

obvious to one having ordinary skill in the art to combine the teachings of Myers within the

system of Bal because ASP makes web pages more dynamic and interactive.

30.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura in view

of Liu.

31.   As per claim 12, Yoshiura discloses the system as recited in claim 11. Yoshiura further

discloses determining if a mark with digital signature should be derived and attach to a web page

(Yoshiura: column 30 lines 37-55). Yoshiura does not explicitly discloses the digital signature

module being further configured to determine whether the web page contains script to invoke

executable code, and to apply a digital signature to the web page only if the web page contains

script to invoke executable code. However, Liu discloses further process is done after

determining if the web page contains script to invoke executable code (Liu: column 8 lines 1-50).

It would have been obvious to one having ordinary skill in the art to combine the teachings of

Liu within the system of Yoshiura because it increases efficiency by avoiding unnecessary

further process.

32.   Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Yoshiura in view of Bal.

33.   As per claim 13, Yoshiura discloses the system as recited in claim 11. Yoshiura does not

explicitly disclose the system further comprising: a control object in the web page; script in the

web page that invokes the control object; and wherein the control object includes executable

instructions that are executable on the electronic device that receives the web page. However,

Bal discloses these limitation (Bal: column 2 lines 30-65). It is well known in the art to have web

pages disclose the above limitation to generate dynamic and interactive web page. Therefore, it

would have been obvious to one having ordinary skill in the art to combine the teachings of Bal

within the system of Yoshiura.

34.   As per claim 16, Yoshiura discloses the system as recited in claim 14. Yoshiura further

discloses the confirmation module is included in the user terminal. Yoshiura does not explicitly

discloses wherein the confirmation module is included in a browser of the electronic device.

However, Bal discloses that limitation (Bal: column 7 lines 26-51). It would have been obvious

to one having ordinary skill in the art to combine the teachings of Bal within the system of

Yoshiura because it is well known in the art for browsers to directly verify security information
on the web.

35.   Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura in view
of Bal and further in view of Renaud et al. U.S. Pat. No. 59580521 (hereinafter Renaud).

36.   As per claim 15, Yoshiura discloses the system as recited in claim 14. Yoshiura does not
explicitly discloses wherein the confirmation module is included in the control object. However,
Bal discloses that verifying digital signature before executing the control object (Bal: column 7
lines 37-38). It would have been obvious to one having ordinary skill in the art to interpret the
mark disclosed by Yoshiura as the digital signature that corresponds to the control software.
Therefore, it would have been obvious to one having ordinary skill in the art to combine the
teachings of Bal within the system of Yoshiura because it is well known in the art to authenticate
digital signature associated with a control software. Yoshiura as modified does not explicitly
disclose the confirmation module is included in the control object. However, Renaud discloses
that limitation (Renaud: column 4 lines 15-18). It is well known in the art to use control objects
to perform security functions. Therefore, it would have been obvious to one having ordinary skill
in the art to combine the teachings of Renaud within the combination of Yoshiura-Bal.

37.   Claims 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in
view of Renaud.

38.   As per claim 19, Bal discloses the system as recited in claim 17. Bal does not explicitly

discloses wherein the confirmation module is included in the control object (Bal: column 7 lines

26-51). However, Renaud discloses that limitation (Renaud: column 4 lines 15-19). It is well

known in the art to use control objects to perform security functions. Therefore, it would have

been obvious to one having ordinary skill in the art to combine the teachings of Renaud within

the system of Bal.

39.   As per claim 24, Bal discloses a web page contained on a computer-readable medium,

comprising: computer-executable script that (Bal: column 1 line 19 – column 3 line 19), when

executed on a computing device, invokes an executable control object on the computing device

(Bal: column 1 line 19 – column 3 line 19); and a digital signature (Bal: column 1 line 19 –

column 3 line 19). Bal does not explicitly disclose the digital signature uniquely identifying an

author of the web page. However, Renaud discloses that limitation (Renaud: column 4 lines 19-

34). It would have been obvious to one having ordinary skill in the art to combine the teachings

of Renaud within the system of Bal because it increases security by checking whether the source

of the page is authentic.

40.   As per claim 26, Bal as modified discloses the web page as recited in claim 24, Bal as

modified further discloses the web page comprising the executable control object (Bal: column 1

line 19 – column 3 line 19).

41.   As per claim 32, Bal discloses computer-readable medium, comprising

computer-executable instructions that, when executed on a computer, perform the following:

authenticating a web page that invokes the control object (Bal: column 7 lines 29-52); and

executing a data-handling task on the computer if the web page is determined to be authentic

(Bal: column 7 lines 29-52). Bal does not explicitly disclose a control object that performs the

security functions. However, Renaud discloses that limitation (Renaud: column 4 lines 15-18). It

is well known in the art to use control objects to perform security functions. Therefore, it would

have been obvious to one having ordinary skill in the art to combine the teachings of Renaud

within the system of Bal.

42.   As per claim 33, Bal as modified discloses the control object as recited in claim 32. Bal

as modified further discloses wherein the web page is authenticated utilizing a digital signature

attached to the web page (Bal: column 7 lines 29-52).

43.   As per claim 34, Bal discloses the control object as recited in claim 32. Bal further

discloses instructions to determine if a source of the web page is authorized to invoke the

data-handling task prior to executing the data-handling task (Bal: column 7 lines 29-51).

44.   As per claim 35, Bal discloses modulated data signal having data fields encoded thereon

transmitted over a communication channel (Bal: column 7 lines 29-51: sending web page along

with digital signature). Bal does not explicitly disclose a first data field containing data

representing a web page and a second data field containing data representing a digital signature

derived from the web page represented by the first data field. However, Renaud discloses having

data fields and a signature field (Renaud: figure 3 and column 6 lines 46-65). Therefore, it would

have been obvious to one having ordinary skill in the art to combine the teachings of Renaud

within the system of Bal because it allows a system to authenticate the digital signature before

accessing the digital data or control objects.

45.   Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view of

Renaud and further in view of Yoshiura.

46.   As per claim 25, Bal as modified discloses the web page as recited in claim 24. Bal as

modified does not explicitly disclose wherein the digital signature is appended to the contents of

the web page. However, Yoshiura discloses that limitation (Yoshiura: column 30 lines 43-55). It

is well known in the art to append digital signature onto a data content. Therefore, it would have

been obvious to one having ordinary skill in the art to combine the teachings of Yoshiura within

the combination of Bal-Renaud.

47.   Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view

of Liu.

48.   As per claim 27, Bal discloses a web browser contained on a computer-readable medium

of a client computer, comprising computer-executable instructions that, when executed by the

client computer, perform the following: authenticating the web page using a digital signature

(Bal: column 1 line 19 – column 3 line 19 and column 7 lines 26-51); and invoking the control

object if the source of the web page is authenticated (Bal: column 1 line 19 – column 3 line 19).

Bal does not explicitly disclose determining if a web page contains instructions to invoke a

control object. However, Liu discloses that limitation (Liu: column 8 lines 1-50). It would have

been obvious to one having ordinary skill in the art to combine the teachings of Liu within the

system of Bal because it increases efficiency by avoiding unnecessary further process.

49.   As per claim 28, Bal as modified discloses the web browser as recited in claim 27. Bal as

modified further disclose determining if the web page contains executable script to invoke a

control object (Liu: column 8 lines 1-50); and wherein the authenticating the web page further

comprises authenticating the web page only if the web page contains executable script to invoke

a control object (Liu: column 8 lines 1-50). Same rationale applies here as above in rejecting

claim 43.

50.   As per claim 29 and 30, Bal as modified discloses the web browser as recited in claim 27.

Bal as modified further discloses determining if the web page contains control software (Liu:

column 8 lines 1-50) and require all controls to have digital signature for authentication (Bal:

column 3 lines 7-19); and wherein the authenticating the web page further comprises

authenticating the web page only if the web page contains a digital signature (Bal: column 7 lines

32-38). Bal as modified indirectly disclose determining if the web page contains a digital

signature.

51.   As per claim 31, Bal as modified discloses the web browser as recited in claim 27. Bal as

modified further discloses instructions to determine if an authenticated web page comes from a

source that is authorized to invoke the control object (Bal: column 7 lines 29-51).

Conclusion

52.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Parthasarathy et al. U.S. Pat. No. 6347398 discloses automatic software downloading

from a computer network.

Golan U.S. Pat. No. 5974549 discloses creating a secure sandbox within which a plurality

of downloaded software components can execute in a secure manner.

Flynn et al. U.S. Pat. No. 6567918 discloses saved web page security system and method.

Brim U.S. Pat. No. 5835914 discloses method for preserving and reusing software objects

associated with web pages.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shin-Hon Chen whose telephone number is (703) 305-8654. The

examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen
Examiner
Art Unit 2131

SC

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100